CANCER OF THE EAR, NOSE AND THROAT.

As Well as Tuberculosis, Lupus and Various Minor Affections Treated by the High Frequency Current; With Report of One Case of Carcinoma of the Superior Maxillary.

Illustrations Used in This Paper Are From Dr. W. L. Clark's Publication.

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When a procedure is recommended for the treatment and cure of cancer, tuberculosis or lupus, it at once attracts our attention because all the surgical procedures heretofore have been so unsatisfactory.

During the past year I have seen some twelve cases of cancer of the tongue, tonsil or of the nose, besides four cases of cancer of the larynx. Some of the cases have been operated, some have refused operation. However, the whole lot of them are now dead.

Fig. 1. A—Advanced squamous cell carcinoma of the tongue of four months' duration in a man, aged 46, referred by Drs. John B. Deaver and Walter Ziegler of Philadelphia. The cervical glands were involved and treated by the roentgen ray. The tongue was amputated at the line of the tonsils by the electrothermic coagulation method under general anesthesia, without hemorrhage. Little pain or discomfort followed the operation. B—Result after electrothermic treatment. No local recurrence in two months. This photograph is shown to demonstrate the practicability of amputation of the tongue by the electrothermic method. C—Tongue in another case immediately after amputation by this method. Note coagulated area at distal end.

Fig. 2. A—Rodent ulcer involving bone of maxilla and mandible, of three years' duration, in a man, aged 50, referred by Dr. William H. Schmidt of Philadelphia. One electrothermic coagulation treatment was given under ether anesthesia in April, 1915. B—Result. No local recurrence in eight months, when patient died with what was diagnosed as abscess of the brain by the attending physician, but which may have been metastasis.

I wish to say that this high mortality is probably at variance with mortality tables covering a greater number of cases. It is a known fact that occasionally a case will get well, but I should say the mortality must be near 80 or 90% for those that live for one year or more.

It naturally follows that any procedure that offers anything better than this would be accepted very readily.

A publication by Dr. W. L. Clark appeared in the Journal of the American Medical Association, of October 26th, 1918, entitled "Cancer of the Oral Cavity, Jaws and Throat; Treatment by Electrothermic Methods or in Combination with Surgery, the Roentgen Ray, and Radium; With an Analysis of Two Hundred Cases So Treated." At once I wrote for particular instructions regarding the use of this high-frequency current. Correspondence was unsatisfactory and I made a trip to Philadelphia to see the work for myself.

Fig. 3. A—Epithelioma of tongue of six months' duration in a man, aged 74, referred by Dr. J. C. Biddle of Fountain Springs, Pa. B—Result of dessication treatment under local anesthesia in May, 1911. There were enlarged glands on both sides of the neck in this case, which were probably inflammatory, since they disappeared after the treatment of the tongue lesion and the application of the roentgen ray to the neck. There was no recurrence in four and one-half years, when the patient died of some other disease.

To quote Dr. Clark, rationale of the dessication method is as follows:—

"The effect of heat when applied to the living tissue varies according to its intensity, from simple hyperemia to carbonization. Somewhere between these antithetic points, there is a thermic degree, the effect of which is more than hyperemia, but not the extreme effect of carbonization. I have called this the dessication point, because this word seems to describe the effect produced upon the tissues better than any other term. When a thermic intensity at the dessication point is generated, controlled and sustained upon or into a given area of tissue, dehydration of the tissue ensues. The cell capsule is ruptured and what before was a living tissue, is then transformed into a dry, inert, sterile mass. (These facts have been proven by microscopical studies.) Just enough heat is generated to devitalize tissue without actually carbonizing it. At the dessication point, living or cadaveric tissue as well as vegetable matter or substances such as hard soap which has been hydrated, may be dehydrated through a sheet of white paper without charring or discoloring the paper, and the transformed matter pulverized between the fingers. The heat is transmitted through the paper without discoloring it for the reason that the thermic degree is not carried to the fusing point, and the paper is not a sufficient

obstacle to prevent the heat from being transmitted through it. If the heat intensity is increased, the paper will be charred, and if carried farther, it will ignite. This dessicating action may be superficial or carried deeply into the tissues at will. Eminent physicists are in accord with me as to the correctness of the dessication principle and I submit this method as an addition to our armamentarium for effectively meeting some surgical conditions."*

In other words, the carcinomatous cell is at some time a localized affair—it is a recognized

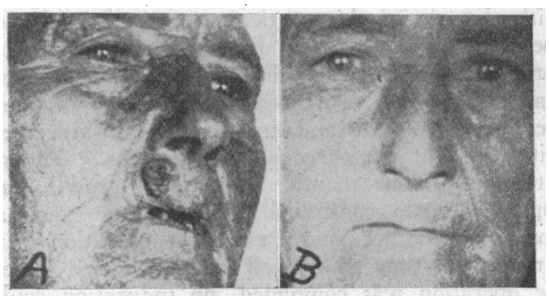

Fig. 4. A—Basal cell epithelioma of the upper lip in a woman, aged 72, referred by Dr. William Hamilton of Philadelphia. One dessication treatment was given in September, 1914. B—Result. Note absence of contracted scar. No recurrence in nearly four years.

fact that all new cell formation is less resistent than older cells and tissue, and for this reason the cancer cell is destroyed far beyond the healthy cell by the use of the high-frequency current.

During a period of two weeks, I saw between three and four hundred cases of all kinds.

Some very extensive and large; all of the group had been tampered with in one way or other.

Two cases in particular were cancer of the tongue. In one, the organ was completely removed by the high frequency current. The patient had a slight hemorrhage five or six days following. As to the ultimate outcome, I cannot say, but I am fearful of a recurrence in this

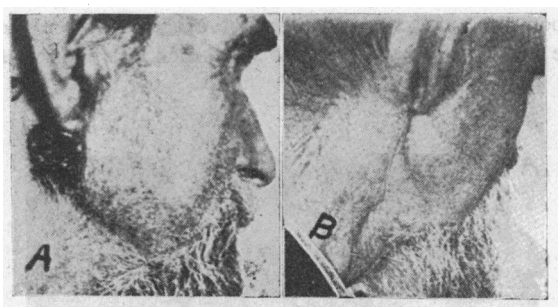

Fig. 5. A—Basal cell epithelioma, involving tissue and bone at angle of jaw, in a man, aged 73, referred by Dr. John Hedges of Philadelphia. The roentgen ray had previously been used without success. One dessication treatment under local anesthesia was given in March, 1917. B—Result of one treatment. Note absence of contracted scar. No recurrence in one year and a half.

particular case, because the induration continues into the floor of the mouth. The second case was a small epithelioma of the tongue, with every chance in the world for a complete cure.

Another case of leukoplakia along the inner side of the cheek; very extensive. Dr. Clark said that he thought the patient would make a permanent recovery.

I saw more than half a dozen such cases that

Fig. 6. A—Epithelioma involving nose, cheek, brow, eyelid, globe, and bones of orbit and antrum in a woman, aged 59, referred by Dr. T. L. Bradford of Philadelphia. Roentgen treatment had previously been used unsuccessfully. One intensive electrothermic coagulation treatment under ether anesthesia was given in March, 1917. B—Result of one treatment. No recurrence in year and a half.

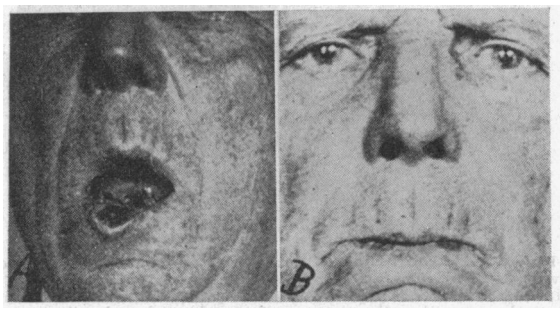

Fig. 7. A—Epithelioma of lower lip, a recurrence after surgical excision, in a man, aged 75, referred by Dr. Paul Cassidy of Philadelphia. One dessication treatment under local anesthesia was given in April, 1915. B—Result of treatment. Note absence of contracted scar and regeneration of lost tissue in lip. No recurrence in more than three years.

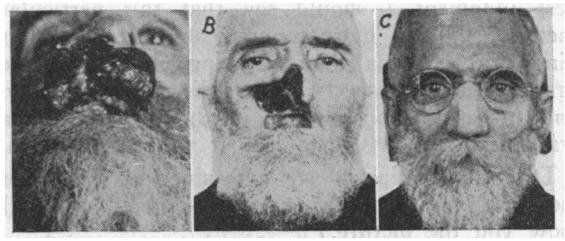

Fig. 8. A—Epithelioma involving upper lip, antrum, septum, nose, alveolus and hard palate, of three years' duration, in a man, aged 66, referred by Dr. J. D. Graber of Royersford, Pa. Previous treatment by plasters and the roentgen ray had been unsuccessful. The case was pronounced hopeless from a surgical standpoint by Dr. John Chalmers DaCosta of Philadelphia. One electrothermic coagulation treatment under ether anesthesia was given, March 1, 1916, and two slight recurrences were treated under local anesthesia by the dessication method. B—Final result, with no recurrence in two years and five months. C—Reconstructed features by the sculpture method executed by Major R. Tait McKenzie of Philadelphia and Mrs. Alan Chesney of Baltimore. A plaster cast was made and the lost features built out in clay. A copper plate of suitable thickness was deposited on the cast by electrolysis and then silver plated. This plate was painted to match the tint of the skin, the mustache added and the plate attached to the rims of the glasses. A similar plate may be kept in place be means of spirit gum without the aid of the glass frames if desired. A plate is under construction to replace the hard palate and with artificial upper and lower teeth, in the hope that the patient may improve articulation and better masticate his food.

* American Journal of Obstetrics and Diseases of Women and Children; Vol. LXXII, No. 1, 1915.

were cured or in the process of getting well.

I saw probably fifteen cases of recurrent cancer of the cheek or jaw or tonsil that had been operated by the knife by the best surgeons of Philadelphia. Some of them were in the process of complete recovery, while others had metastases elsewhere following the high-frequency current.

I saw three cases of lupus of the nose; two of them well and the other in the process of getting well.

The greatest number of cases were confined to the skin and these were so satisfactory that a cure was promised in many instances.

During the two weeks of my stay I saw only one recurrence at the site of the old lesion. This case had not been seen in more than two years. There were quite a numbr of cases (six or eight) that had metastases to other parts.

There were other cases that were beyond reach.

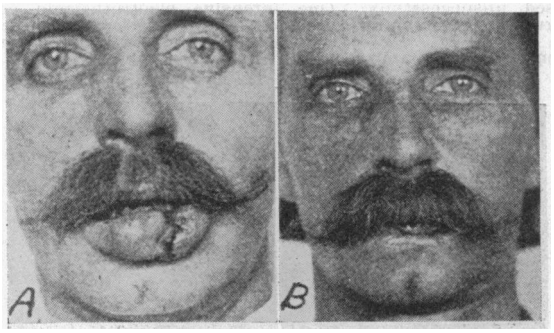

Fig. 9. A—Epithelioma involving the whole of the lower lip, in a man, aged 48, referred by Drs. G. C. Bird and J. F. Ulman of Philadelphia. One dessication operation to the lip was performed under local anesthesia. B—Result of dessication treatment. Note absence of contracted cicatrix and regeneration of lost tissue. No recurrence in lip in four months.

During these two weeks I saw more cancer cases than I had seen in my lifetime. From my best judgment I should say that this particular method is doing more to eradicate this particular kind of carcinoma than anything else up to the present time irrespective of radium and X-Ray, and my conviction is that in the near future a way will be devised to use it in the abdomen.

Dr. Clark reports an extensive carcinoma of the nose and accessory cavities—cured. (I will show you the picture.)

This very case illustrates the possibility of using the current in cavities, and for that reason I am going to use it in the first case of carcinoma of the larynx that has a chance for recovery.

I am going to do it in the following way: First, do a tracheotomy and as soon as the patient can handle the tube well, will do a laryngofissure, opening the larynx wide, applying the current deep to all the involved parts. Keeping this wound open until such time as I consider it should be closed. This is as I see the procedure today. There are so many conditions that may arise that one does not anticipate and therefore, my procedures may be radically different. If I can bring a single case to a successful issue, the procedure can be further modified in one way or other to make possible the cure of this distressing affliction.

Case A—Age 45. Male. Farmer. Referred by Dr. Blake Franklin, November 15, 1918. Up to the present time the patient has been in the best of health. About November 1st, had the wisdom-tooth of the upper jaw extracted. Following this, a fungus growth appeared in the tooth socket. This was examined at the Pathological Laboratory of the University of California and pronounced carcinoma. A few days later, patient was directed to me to see what could be done with the use of this particular current. Another specimen examined by St. Francis Hospital Laboratory, confirmed the original diagnosis. As there was considerable pyorrhoea of all the teeth, they were all removed and in two weeks proceeded with a light high-frequency apparatus. Patient returning in one month. Additional growth had appeared, again confirmed by laboratory examination and another more extensive operation performed, this time going well into the bone. When the operation was completed, no induration could be felt at any place. In less than a month, he returned again with a fungus-like growth confined to an area about the size of the end of the small finger. Carious bone from the previous operation had not entirely separated and as this bone was not loose, it was not disturbed. Two months following this, I removed five different pieces of bone; the smallest being larger than the ordinary bean. The largest piece, about two inches long and a quarter of an inch wide. Going over this entire cavity with a probe, I could not detect any additional uncovered bone. The case should heal rapidly. If it does not, I will again go over the field more extensively than ever.

Dr. Clark tells me that a second, third and fourth application may be used with a possibility of effecting a cure; that you have every chance for a cure as long as the glands in the neighborhood remain free. This is not exactly so, because he has had some cases that have died of metastases to a distant part.

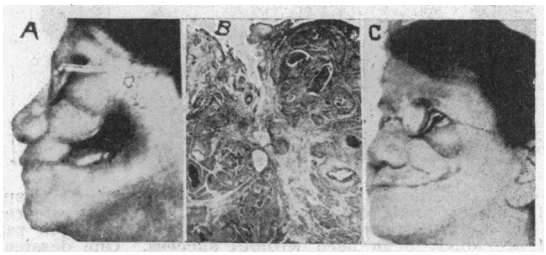

Fig. 10. Squamous cell carcinoma involving antrum, alveolus, hard palate and buccal surface on left side in a woman, aged 60, referred by Dr. E. B. Miller of Philadelphia. Since involvement was extensive in this case and some of the diseased tissue was inaccessible, preliminary surgical removal was done by Dr. G. M. Dorrance, followed immediately by electrothermic treatment. A—Result of this treatment. No recurrence in fifteen months. B—Low power photomicrograph (showing prickle cells) on which diagnosis was based. C—Result of plastic operation in which tissues were separated from bony attachments, and cheeks drawn together and sutured.